

# EUROPEAN PATENT OFFICE

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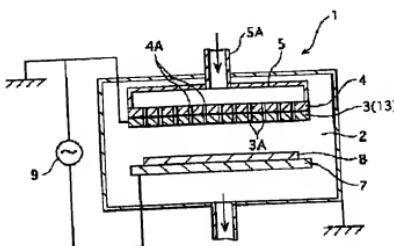
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TITLE : ELECTRODE FOR PROCESSING  
DEVICE UTILIZING PLASMA, AND  
MANUFACTURE OF SAME  
ELECTRODE



ABSTRACT : PROBLEM TO BE SOLVED: To provide an electrode for a processing device utilizing plasma, and a manufacturing method of the electrode which is of a long service life and low cost, and in which generation of particles and metal contamination are less

SOLUTION: An upper electrode 3 disposed at an upper part of a reaction chamber 2 in a parallel flat plate type plasma etching device 1 is formed of a main component of silicone including an electric resistance lowering element. A specific resistance of the upper electrode 3 is set at  $0.1\Omega \cdot \text{cm} \cdot \text{a}$  value in which the element is included by solution limit quantity. In the upper electrode 3, a number of gas supply small holes 3A of a diameter of 0.5mm are bored by an electric discharge machine, and a heat affected layer generated by processing is eliminated by chemical etching.

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